	Application No.	Applicant(s)	
Notice of Allowability	10/017,703	PAYNE, BRADLEY A.	
	Examiner	Art Unit	
	Kimbinh T. Nguyen	2671	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.			
1. This communication is responsive to <u>amendment filed 08/12/04</u> .			
2. The allowed claim(s) is/are <u>1,3-6,8-21,23-26 and 28-40</u> .			
3. The drawings filed on 14 December 2001 are accepted by the Examiner.			
<ul> <li>4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some* c) None of the: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> <li>Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* Certified copies not received:</li> </ul>			
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.			
5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.			
<ul> <li>6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.</li> <li>(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached</li> <li>1) hereto or 2) to Paper No./Mail Date</li> <li>(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> </ul>			
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.			
<ul> <li>Attachment(s)</li> <li>1. ☐ Notice of References Cited (PTO-892)</li> <li>2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/C Paper No./Mail Date 9/16/04)</li> <li>4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	6. ☐ Interview Summary Paper No./Mail Dat 08), 7. ☐ Examiner's Amendn	e	

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## **DETAILED ACTION**

- 1. This action is responsive to amendment filed 08/12/04.
- 2. Claims 2, 7, 22 and 27 have been canceled; accordingly, claims 1, 3-6, 8-21, 23-26 and 28-40 are pending in the application.

## Reasons for Allowance

- 3. Claims 1, 3-6, 8-21, 23-26 and 28-40 are allowed.
- 4. The following is an examiner's statement of reasons for allowance:

Claim 1 discloses a method of modifying a geometric shape, comprising: defining a multi-dimensional space an array of values representing a geometrical shape; selecting a modification function; applying an inverse function of the modification function to the array of values to produce a modified array; deducing from the modified array a modification of the geometrical shape that would result from a direct application of the modification function to the array; and applying the resulting modification by manipulation of a virtual tool; wherein the geometrical shape is displaced with respect to the virtual tool. The closest prior art Milliron teaches geometric warps, deformation by using modification function and applying inverse function of the modification function to produce a modified array; however, Milliron does not teach deducing from the modified array a modification of the geometrical shape that would result from a direct application of the modification function to the array; applying the resulting modification of the geometrical shape by manipulation of a virtual tool; wherein the geometrical shape is displaced with respect to the virtual tool. For these reasons, claim 1 is allowed.

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Claim 21 discloses a system for modifying a geometrical shape comprising the modules for performing the method steps of claim 1; therefore, claim 21 is allowed under the same reasons set forth in claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimbinh T. Nguyen whose telephone number is (703) 305-9683. The examiner can normally be reached on Monday to Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached at (703) 305-9798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

September 16, 2004

Kimbinh Nguyen

Patent Examiner AU 2671

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